Art IV.—Further Descriptions of the Tertiary Polyzoa of Victoria.

Part X.

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(With Plates VII., VIII.).

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Crisia acuta, n. sp. (Pl. VII., Fig. 1).

Zoarium jointed, convex in front; surface glabrous, with linear punctations. Zooecia totally immersed and undefined. Thyrostomes 0.33 to 0.40 mm. apart, round; peristome slightly raised, with very acute spinous process above.

Locality, Cape Otway (J. Dennant).

A single small specimen. This species is distinguished from others by the convexity and smoothness of the front surface of the zoarium, the undefined zooccia; the linear punctation, and the very acute supra-oral process.

Idmonea elongata, n. sp. (Pl. VII., Fig. 2).

Zoarium branching, 0.5 mm. broad. Zooecia in alternate series of three, 1 to 2 mm. long. Distal ends turned outwards; distance between thyrostomes in each series 1 mm., but some zooecia in the central portion are 2 mm. long.

Locality, Mitchell River (J. Dennant).

A robust species; it differs from all others in the very elongated zooecia.

Idmonea delicatissima, n. sp. (Pl. VII., Fig. 3).

Zoarium branching, very slender. Zooecia in alternate series of two, very narrow, 0.05 mm. wide, slightly rugose; distal ends exserted about 0.1 to 0.15 mm., exserted portion quite smooth. Thyrostomes 0.4 to 0.6 mm. apart.

Locality, Mitchell River (J. Dennant).

A very slender delicate species, with remarkably small zooecia.

Idmonea parvula, n. sp. (Pl. VII., Fig. 4).

Zoarium 2.2 mm. long, 0.8 wide, with a narrow selvedge. Zooecia in two series of three, immersed. Thyrostomes exserted, 0.3 mm. high; distance between series, 0.2 to 0.3 mm.

Locality, Mitchell River (J. Dennant).

A single specimen. The figure shows the entire zoarium, and is drawn so as to show the regular disposition of the zooecia on one side, and a lateral view of the exserted thyrostomes of the zooecia on the other side of the zoarium.

Idmonea concinna, n. sp. (Pl. VII., Fig. 5).

Zoarium short, 2 mm. long, 1.2 mm. wide, with a selvedge. Zooecia in two series of four to six; distance between the series 0.2 to 0.3 mm. Thyrostomes connate, exserted about 0.2 mm.

Locality, Filter Quarries (T. S. Hall).

This is a very short, compact form. The figure shows the complete zoarium and is drawn so as to show the regular series of connate thyrostomes on one side, and the edge shows the lateral view of the other series.

Idmonea angustata, n. sp. (Pl. VII., Fig. 6).

Zoarium narrow, branched. Zooecia 0.05 mm. wide, in two series of four to five. Thyrostomes much exserted, distance between each series 0.3 to 0.45 mm. Ooecium tumid, overlying the zooecia, situated below a bifurcation.

Locality, Filter Quarries (T. S. Hall).

This is a very distinct form, the zooecia are very narrow and very regularly disposed.

Idmonea uniseriata, n. sp. (Pl. VII., Fig. 7).

Zoarium branching. Zooecia large, in single series, 0.2 mm. wide, 1.5 mm. long. Thyrostomes 0.5 to 1 mm. apart.

Locality, Mitchell River (J. Dennant).

This species is peculiar in that there is only a single series of zooecia. It may possibly be separated generically from *Idmonea*, but the character of its growth seems to be Idmonean, though the series of zooecia are single.

Idmonea morningtoniensis, n. sp. (Pl. VII., Fig. 8.)

Zoarium ligulate, broad. Zooccia in a more or less regular series of two, three or four, diverging from the central line; distal part curved forwards; length of zooccia 0.3 to 0.4 mm.; width, 0.07 to 0.17. Thyrostome 0.05 to 0.1 mm. in diameter.

Locality, Mornington (T. S. Hall).

This species is near *I. lata*, McG., but there are fewer zooccia in each row, and they are only about half the size, and not so connate as in that species.

Filisparsa concinna, n. sp. (Pl. VII., Fig. 9).

Zoarium branching, 0.6 mm. wide. Zooccia in quincunx order, immersed, with long tubular peristomes, 0.2 to 0.4 mm. long, the immersed portion of the zooccia with a flat surface and raised margins.

Locality, Aire Coastal beds (Messrs. Hall and Pritchard).

This is a very peculiar form. I have placed it in *Filisparsa*, as the zooccia are irregularly arranged on the whole; in the central portion of the zoarium they are all in fairly regular quincunx order, but the marginal zooccia are very irregular, and the distal portion protrudes at almost a right angle to the surface, to a distance of 0.2 to 0.4 mm. The peristomes of the central zooccia are evidently imperfect. The margins of the immersed portion of the zooccia are raised, forming ridges, which is a very peculiar characteristic, and not present in any other species of the genus.

(!) Diastopora dennanti, n. sp. (Pl. VII., Fig. 10).

Zoarium broadly ligulate, surface nearly flat. Zooecia immersed, very slightly exserted at distal end. Thyrostomes transversely elliptical, 0.15 mm. broad, with a small lenticular cavity just inside the proximal margin. Thyrostomes 0.2 mm. apart, but the zooecia are in quincunx order, and are probably 0.5 mm. long.

Locality, Mitchell River (J. Dennant).

This is a very peculiar form, as it shows a lenticular cavity just within the proximal margin of the thyrostome, which may indicate the locality of an avicularium; though so far as I know such an organ has not hitherto been found in a similar position in any allied form of Cyclostomata. I have placed it provisionally in *Diastopora*, but it probably, on account of the peculiar lenticular cavity, will require a new genus (if not family) for its reception. I have named this species after the late John Dennant, from whom I received the material from which it and many other new species were obtained.

Tubulipora margaritacea, n. sp. Pl. VIII., Fig. 11).

Zoarium small, ligulate. 2 mm. long; 0.8 wide. Zooecia cylindrical, partly immersed. Thyrostome tubular, exserted; surface slightly rugose, but porcellanous. Length of zooecia, 0.3 to 0.9 mm.; diameter, 0.18 to 0.15 mm.

Locality, Clifton Bank, Muddy Creek (T. S. Hall).

A single specimen, noticeable on account of the shining porcellanous surface. This genus has not hitherto been recorded from our Tertiary strata.

Tubulipora minuta, n. sp. (Pl. VIII., Fig. 12).

Zoarium small, 1.5 mm. long; 0.6 mm. wide, ligulate. Zooecia very small, immersed. Thyrostomes 0.05 in diameter, exserted 0.1 to 0.25 mm. Ooecia inflated, embracing many zooecia; surface granulated.

Locality, Mitchell River (J. Dennant).

A single specimen. Zooecia totally immersed, with the tubular orifices projecting at nearly right angles to the surface.

Reticulipora airensis, n. ap. (Pl. VIII., Fig. 13).

Zoarium reticulate; branches subtriangular in section, upper portion sublineate, showing the edges of the two zoarial laminae. Zooecia on both sides of the branches, elongated, somewhat flattened on the surface. Thyrostomes disposed in a more or less regular transverse series of five to seven. Length of zooecia 0.3 to 1 mm.; breadth, 0.1 to 0.15 mm.

Locality, Aire Coastal beds (Messrs. Hall and Pritchard).

The specimens are very fragmentary, but show that the fenestrae are more or less angular, quadrate or diamond-shaped.

This species in appearance is very similar to *Crisina* (*Retecrisina*) obliqua, D'Orbigny, as described and figured by Dr. Gregory in his "Catalogue of the Cretaceous Bryozoa in the

British Museum," vol. i., p. 178, pl. viii., figs. 8 and 9, but it is a very much smaller form, the zooecia are not half the width, and they are not half so numerous in the series, nor so regularly disposed. It is also similar to *R. transennata* Waters (Q.J.G.S., vol. xl., p. 689), but the zooecia are fewer in series and clearly defined, not, as in that species, totally immersed with the apertures only exserted, and there are no small tubular openings, as in *R. transennata*.

Stomatopora gippslandii, n. sp. (Pl. VIII., Fig. 14). Zoarium adherent. Zooecia in single or double series, somewhat rugose, distal part slightly exserted; peristome elevated. Length of zooccia 0.5 to 0.7 mm.; width, 0.25 to 0.35 mm.

Locality, Mitchell River (J. Dennant).

A small fragment on the interior of a bivalve shell; it is near S. granulata (M. Edwards), but the zooecia are very much shorter.

Spiropora minuta, n. sp. (Pl. VIII., Fig. 15). Zoarium slender, branching. Zooecia small, 0.2 to 0.4 mm. long, 0.07 to 0.1 mm. wide; distal part slightly curved outwards; regularly disposed.

Locality, Mitchell River (J. Dennant).

This is a very neat, small-celled species, and a great contrast to that next described.

Spiropora gigantea, n. sp. (Pl. VIII., Fig. 16).

Zoarium very robust, branching. Zooecia large, 0.6 to 0.9 mm. long; 0.15 to 0.25 mm. wide; distal part curved outwards. Thyrostome contracted, with an annular peristome.

Locality, Waurn Ponds (T. S. Hall).

This is a remarkably robust species, the zooecia being, comparatively speaking, enormous (the magnification of the figure is only about one-half that of the figure of *S. minutu*). At the base of three zooecia are three hemispherical processes, the function of which is problematical.

Entalophora sparsa, n. sp. (Pl. VIII., Fig 17).

Zoarium branched. Zooecia undefined, sparsely and irregularly disposed; distal portion turned outwards. Thyrostomes 0.3 to 0.8 mm. apart.

Locality, Filter Quarries (T. S. Hall).

This species occurs as long slender branches, and has very few zooecia in the whorls, which are very irregular.

Entalaphora quadrata, n. sp. (Pl. VIII., Fig. 18).

Zoarium robust. The whorls are composed of four zooecia in alternate series, 0.6 mm. apart, but the zooecia are 1.2 mm. long, 0.1 to 0.17 mm. wide; the front surface is flat, with raised marginal ridges; they are slightly exserted at the distal end, and the peristomes are thickened.

Locality, Filter Quarries (T. S. Hall).

This species has the zooecia very much elongated, and only four in a whorl.

Entalophora airensis, n. sp. (Pl. VIII., Fig. 19).

Zoarium very slender. Zooecia very long, 0.7 to 1 mm.; 0.07 to 0.15 mm. wide, in irregular order; distal portion curved outwards, with a thickened peristome.

Locality, Aire Coastal beds (Messrs. Hall and Pritchard).

This is a very slender species, the zooecia are very long, and they have a thickened peristome.

Berenicea nitida, n. sp. (Pl. VIII., Fig. 20).

Zoarium adherent. Zooecia almost totally immersed; thyrostome small, 0.025 mm. in diameter, slightly exserted.

Locality, Filter Quarries (T. S. Hall).

A single specimen about 4 mm, in diameter. The zooecia are irreguarly disposed, but here and there they are in linear order, and at practically the same distance (0.1 mm.) from one another.

This genus has not hitherto been recorded as occurring in our Tertiary formations.

EXPLANATION OF PLATE.

Fig. 1—Crisia acuta. $\times 48/2$.

2—Idmonea elongata, $\times 48/2$.

3—1dmonea delicatissima. \times 48/2.

4—Idmonea parvula. $\times 48/2$.

